Electronic Health Record (EHR) Data Quality Best Practices for Increased Scientific Acceptability

TEP Web Meeting 5

June 11, 2020

Agenda

- Welcome, Roll Call, and Meeting Objectives

- Discuss Best Practices and Recommendations to Promote Data Quality

- Opportunity for Public and Member Comment

- Next Steps

Welcome, Roll Call, and Meeting Objectives

Project Staff

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TEP Roster

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- Mike Sacca

Federal Liaisons

- Albert Taylor, MD

- David Kendrick, MD, MPH

Scope and Data Quality

"Data Quality" for this project refers to:

- How well EHR data (structured and unstructured) supports clinical quality measurement, including eCQMs as well as other electronic measurement (such as standardized assessment tools used in PAC)

Data Quality for this project does NOT refer to

- How well EHRs collect data for the primary purpose of supporting delivery of care

"True north" statement:

- *The purpose of this Task Order (TO) is to establish a technical expert panel (TEP) to recommend best practices for improving EHR data in ways that support healthcare performance measures at all phases including measure development, measure endorsement, and implementation.*

Project Timeline

Meeting	Date/Time
TEP Orientation	November 13, 2019, 1:30 pm – 3:30 pm ET
TEP Web Meeting 2	January 14, 2020, 11:00 am – 1:00 pm ET
TEP Web Meeting 3	March 31, 2020, 1:30 pm – 3:30 pm ET
TEP Web Meeting 4	April 29, 2020, 1:00 – 3:00 pm ET
Final Environmental Scan Report	May 19, 2019
TEP Web Meeting 5	June 11, 2020, 11:00 am – 1:00 pm ET
TEP Web Meeting 6	September 9, 2020, 11:00 am – 1:00 pm ET
TEP Web Meeting 7	November 10, 2020, 1:30 pm – 3:30 pm ET
Final TEP Findings and Recommendations Report	December 24, 2020

TEP Web Meeting Objectives

- **Web Meeting 5** – Discuss recommendations in depth
  - A survey will be sent after Web Meeting 5 to prioritize recommendations

- **Web Meeting 6** – Review draft recommendations report

- **Web Meeting 7** – Review and respond to public comments on draft recommendations report

Ground Rules

- **Timekeeping:** Time is limited today, so please keep comments brief and focused; all TEP members are encouraged to submit follow-up comments to EHRDataQuality@qualityforum.org

- **Focus on Recommendations:** Today's goal is to identify and review recommendations for the final report; please focus on solutions

- **Feasibility and Impact:** We are seeking recommendations that are feasible and impactful, but be willing to propose ambitious stretch goals

- **Facilitation:** Co-chairs and/or NQF staff may interrupt discussion to ensure the meeting goals are accomplished

Detailed Agenda

- Recommendations for Measure Development Phase

- Recommendations for Measure Endorsement

- Recommendations for Measure Implementation Phase

- Other Recommendations

- Public Comments

- Next Steps

Recommendations for Measure Development

Challenges: Availability of Data

- EHR data needed to support the testing required for scientific acceptability are not always readily available

- Test sites need to implement measures in advance of formal inclusion in a CMS federal program for developers to meet NQF testing requirements; financially, operationally, and logistically challenging

- EHR systems within health care organizations would need to be willing and able to participate in testing scientific acceptability

- Identifying test sites that are currently collecting all required data elements can be difficult

Discussion: Recommendations

- Create incentives for providers and vendors to support measure testing via CMS Promoting Interoperability and ONC Certification programs
  - What's the process for providing this feedback to these programs?
  - What challenges does CMS or ONC foresee with this recommendation?

- Create a core group for testing and functionality development; provide incentives to the few organizations and vendors who want to do some of the harder work of standardization within a development framework
  - Who needs to be in the core group?
  - What would incentivize participation?

- Other recommendations?

Recommendations for Measure Endorsement

Clarifying NQF Endorsement

- "Data element" level testing for validity

- "Data element" level testing for reliability for unstructured fields

- *Gold Standard c*omparator measures don't have to be eCQMs

- Testing based on Live EHR System vs normalized data sets

- Closely related criteria

Clarifying NQF Endorsement

- "Data element" level validity testing

  - Required for eCQMs and EHR sourced measures (since summer 2019)

  - Data element refers to components more granular than measure score

  - In eCQMs this means at least at the population level – Initial population, numerator, denominator, exclusions, exceptions

Clarifying NQF Endorsement

- "Data element" level reliability testing

  - Required for eCQMs and EHR sourced measures when using unstructured fields

  - In addition to (not instead of) data element validity testing

  - Data element refers to components more granular than measure score

  - In eCQMs this means at least at the population level – Initial population, numerator, denominator, exclusions, exceptions

Clarifying NQF Endorsement

- Testing with Live EHR system vs normalized data set

    - **NQF current guidance:** If a developer is testing an eCQM using any type of normalized EHR clinical data (e.g. from multiple EHR sources), NQF requires, at a minimum, supporting information of what schemas are included in the normalized data set and how they are calculated by the measure logic (i.e., what fields have been normalized and how, including any considerations of how this may affect the measure).

    - **Discuss:** what is the acceptable use of centralized and/or normalized data originating *from* multiple providers and EHR system(s) to support measure testing vs. the need to test the full implementation of an eCQM *at* multiple local provider sites

Clarifying NQF Endorsement

- Closely related Endorsement Criteria

  - **Evidence/Validity**
    - » specifications must be consistent with evidence
    - » exclusions must be supported by evidence

  - **Feasibility** scorecard shows field is not accurate. How does this relate to data element **validity** testing

  - **Feasibility** scorecard shows field is unstructured requires data element **reliability** testing

Recommendations for Measure Implementation

Recommendations

- Unrealized opportunities for expanded use of standard tools and formats (i.e. C-CDA, FHIR) to reduce unstructured data
  - What opportunities?

- Improve tools for data capture from different applications
  - FHIR-based apps where patient capture data
  - Improving data capture in clinical apps in general

- Provide support for EHR deployment and upgrades in PAC settings

Other Recommendations on Data Quality

Recommendations for Value Sets

- Identify an independent authority to provide guidance on vocabulary standards, information models, and value sets.
  - How does this differ from current governance (e.g., QDM Management Team, VSAC)?
  - Should there be a way to enforce use of value sets?
  - How can adoption of standards be promoted beyond the federal level?

- Inform the CMS Value Sets Meta Data workgroup
  - What is the scope of this workgroup?
  - Interaction with other efforts (e.g., VSAC, HL7 Terminology Authority)?
  - What is the right way to support this effort?

Question for Prioritization:

- Should value sets be part of the final recommendations report?

Recommendation: Create measures within a "hybrid" model using chart review elements and electronic elements together

- Usually refers to measures that rely on many types of data sources (e.g., claims and EHR data)

- Hybrid could also include manually abstracted and electronically abstracted data

Question for Prioritization:

- Should hybrid measures be part of the final recommendations report?

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Recommendation: Develop quality measures which can be used across settings and support exchange with acute and ambulatory settings

- Challenges
  - No measures that can be used across settings
  - CMS contracting is by setting
  - Don't know what data is used across settings
  - No evidence base for care coordination cross settings

Questions for Prioritization:

- How does this address data quality?

- Should cross-setting measures be part of the final recommendations report?

Recommendation: Create a pilot, but limited framework and model (using one standard such as FHIR and a standard nomenclature for certain value sets, etc.)

Questions for Prioritization

- What are the limits of existing pilot projects for current standards?

- What else should be included as part of the pilot in this recommendation? What would success look like?

- Should a pilot be part of the final recommendations report?

Recommendation: Harmonize existing frameworks for assessing EHR data quality and guidance from standard-settings bodies

- Challenges
  - Inconsistency among frameworks
  - Few frameworks support generalizable and standard approaches
  - Misalignment with NQF eCQM Feasibility Scorecard
  - Need for greater contribution from regulatory bodies and accrediting organizations in setting EHR data quality standards

Question for Prioritization

- Should the harmonization of frameworks be part of the final recommendations report?

Additional solutions

- Do any of these recommendations stand out to the TEP as particularly important and relevant?

- Are there recommendations for specific stakeholder groups such as EHR vendors?

- What additional solutions should we consider that we have not already discussed?

Opportunity for Public and Member Comment

Next Steps

Next Steps

- TEP Findings and Recommendations Draft Report - TEP Review: September 2-16, 2020

- **TEP Web Meeting 6: September 9, 2020**

- 30-day Comment Period on TEP Findings and Recommendations Draft Report: September 30 – October 30, 2020

- **TEP Web Meeting 7: November 10, 2020**

- TEP Findings and Recommendations Final Report: December 24, 2020

Adjourn

THANK YOU.

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